

TYCO 18034 (AT 20958-2110)
PATENT

Amendments to the Claims

1. (currently amended) A low profile contact comprising:
a rounded spring portion having a first end and a second end; and
a first contact beam and a second contact beam extending from said respective first and second ends of said rounded spring portion, said rounded spring portion joining said first contact beam and said second beam, said first contact beam and said second contact beam having substantially parallel respective distal end portions that extend substantially parallel to each other along a longitudinal axis, said distal end portions are adapted to receive a pin therebetween, and at least one of said distal end portions ~~comprising~~ has an upstanding guide surface that is configured to receive and align a connection ~~the~~ the pin between said distal end portions as the pin is inserted along an insertion axis perpendicular to the longitudinal axis.

2. (currently amended) ~~[[A]]~~ The low profile contact in accordance with Claim 1, wherein each of said distal end portions ~~comprise~~ has a respective said guide surface~~[[s]], and~~ and said guide surfaces are divergently flared relative to one another.

3. (canceled)

4. (currently amended) ~~[[A]]~~ The low profile contact in accordance with Claim 1, wherein said spring portion is arched between said first and second ends.

5. (currently amended) ~~[[A]]~~ The low profile contact in accordance with Claim 1, wherein at least one of said first and second contact beams is adapted to communicate with a solder ball.

6. (currently amended) ~~[[A]]~~ The low profile contact in accordance with Claim 1, wherein each of said distal end portions ~~extend along a longitudinal axis, said contact beams~~ having has a lower edge and an upper edge, said guide surface ~~extending~~ extends from said upper edge of its respective said contact beam and ~~having~~ has a flared tip.

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7. (currently amended) ~~[[A]]~~ The low profile contact in accordance with Claim 6, ~~wherein said contact having has~~ has a profile dimension measured along ~~an~~ said insertion axis ~~extending substantially perpendicular to said longitudinal axis~~, said profile dimension being less than about 2mm between said flared tip and said lower edge.

8. (original) A low profile contact assembly comprising:

a first contact comprising a curved resilient spring portion having a first end and a second end, and a first contact beam and a second contact beam extending from said respective first and second ends of said spring portion;

a second contact comprising a curved resilient spring portion having a first end and a second end, and a first contact beam and a second contact beam extending from said respective first and second ends of said spring portion; and

said first and second contacts arranged inversely to one another such that said spring portions of each of said first and second contacts are oriented toward one another in a nested configuration.

9. (currently amended) ~~[[A]]~~ The low profile contact assembly in accordance with Claim 8 wherein at least one of said first and second contacts includes ~~[[a]]~~ the first contact beam and ~~[[a]]~~ the second contact beam having substantially parallel distal end portions, at least one of said distal end portions comprising an upstanding guide surface configured to receive and align a connection pin between said distal end portions.

10. (currently amended) ~~[[A]]~~ The low profile contact assembly in accordance with Claim 8, wherein each of said first and second contact beams of said first and second contacts comprises a guide surface, and said guide surfaces of adjacent contact beams are divergently flared relative to one another.

11. (currently amended) ~~[[A]]~~ The low profile contact assembly in accordance with Claim 8, wherein said first and second contact beams of said first and second contacts include distal end portions adapted to receive a pin therebetween as the pin is inserted along an insertion axis perpendicular to a longitudinal axis of said distal end portions.

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12. (currently amended) ~~[[A]]~~ The low profile contact assembly in accordance with Claim 8, wherein said first and second contacts include~~[[s]]~~ at least one projection configured to contact a solder ball.

13. (currently amended) ~~[[A]]~~ The low profile contact assembly in accordance with Claim 8 wherein each of said contact beams extends along a longitudinal axis, said contact beams having a lower edge and an upper edge, and a guide surface extending from said upper edge and having a flared tip.

14. (currently amended) ~~[[A]]~~ The low profile contact assembly in accordance with Claim ~~[[8]]~~ 13, said first and second contacts having a profile dimension measured along an insertion axis extending substantially perpendicular to said longitudinal axis, said profile dimension being less than about 2mm between said flared tip and said lower edge.

15. (currently amended) A low profile electrical connector comprising:
a housing; and
~~at least one low profile~~ a first contact situated within said housing, said first contact comprising:

a curved resilient spring portion, and

a first contact beam and a second contact beam extending from opposite ends of said spring portion, said first contact beam and said second contact beam having respective distal end portions extending along a longitudinal axis, at least one of said distal end portions comprising an upstanding guide surface configured to receive and align a connection pin inserted between said first and second contact beams along an insertion axis extending substantially perpendicular to said longitudinal axis.

16. (currently amended) ~~[[A]]~~ The low profile electrical connector in accordance with Claim 15, wherein said housing is configured to maintain said first contact beam in a stationary position relative to said housing while permitting said second contact beam to deflect when ~~[[a]]~~ said connection pin is inserted between said contact beams along said insertion axis.

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17. (currently amended) ~~[[A]]~~ The low profile electrical connector in accordance with Claim 15 further comprising a second contact having a curved spring portion and first and second contact beams extending therefrom, said first and second contacts arranged in said housing in an inverse position relative to one another such that said spring portions of each of said first and second contacts are oriented toward one another in a nested configuration.

18. (currently amended) ~~[[A]]~~ The low profile electrical connector in accordance with Claim 15, wherein each of said first and second contact beams comprises a guide surface, and said guide surfaces of said first and second contact beams are divergently flared relative to one another.

19. (currently amended) ~~[[A]]~~ The low profile electrical connector in accordance with Claim ~~[[15]]~~ 17, wherein said first and second contacts include~~[[s]]~~ at least one projection configured to contact a solder ball.

20. (currently amended) ~~[[A]]~~ The low profile electrical connector in accordance with Claim 15, wherein each of said first and second contact beams ~~extend along a longitudinal axis,~~ said contact beams having has a lower edge and an upper edge, ~~and a~~ said guide surface ~~extending extends~~ from said upper edge of its respective said contact beam and ~~having~~ has a flared tip, said first contact has ~~and second contacts having~~ a profile dimension measured along said insertion axis, said profile dimension being less than about 2mm between said flared tip and said lower edge.